Specifications — FOX 4G Matrix 14400

NOTE *The I/O cards are class 1 laser products. They meet the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.*

Optical specifications

Number/type ..... 16 single mode or 16 multimode fiber optic inputs and outputs (16 TX and 16 RX) per I/O card

NOTE *Only one fiber is required to transmit video, audio, and unidirectional data. A second fiber is required to transmit return data for bidirectional control/communication.*

Connectors ..... 16 bidirectional LC connectors per I/O card

Operating distance..... 30 km (18.75 miles) with singlemode (SM) cables with a FOX 500 DA6 SM or FOX 500 TX/RX SM
0.15 km (492') with multimode (MM) cables with a FOX 500 DA6 MM or FOX 500 TX/RX MM

NOTE *Operating distance is approximate. These are typical distances. The maximum distance may be greater than these typical numbers depending on factors such as fiber type, fiber bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks.*

Nominal peak wavelength..... 850 nm for multimode (MM), 1310 nm for single mode (SM)

Transmission power
- Singlemode..... -5 dBm, typical
- Multimode..... -5 dBm, typical

Maximum receiver sensitivity
- Singlemode..... -18 dBm, typical
- Multimode..... -12 dBm, typical

Optical loss budget
- Singlemode..... 13 dB, maximum
- Multimode..... 7 dB, maximum

Maximum channel data rate..... 4.25 Gbps

Video

Routing ..... 16 x 16 up to 144 x 144 unidirectional (TX) matrix *or*
8 x 8 up to 64 x 64 bidirectional (TX/RX) matrix

Gain ..... Unity

Pixel data bit depth ..... 8 bits per channel, 3 channels (R, G, B)

Maximum resolution ..... 1600x1200 @ 60 Hz, digitized pixel for pixel; higher resolutions up to 2048x1120, undersampled

Video/audio input

Number/signal type..... 16 to 144 fiber optic signals

Connectors ..... 16 LC connectors per I/O card

NOTE *Input comes from an Extron FOX 500 TX transmitter, FOX 500 DA6, or FOX 500 DVI transmitter.*

Video/audio output

Number/signal type..... 16 to 144 fiber optic signals

Connectors ..... 16 LC connectors per I/O card

NOTE *Output connects to an Extron FOX 500 RX receiver or FOX 500 DVI receiver.*

Specifications — FOX 4G Matrix 14400, cont'd

Control/remote — switcher

Serial control port	1 bidirectional RS-232 or RS-422, 9-pin female D connector (rear panel) 1 bidirectional RS-232, 2.5 mm mini stereo jack (front panel)
Baud rate and protocol	9600 to 115200 baud, 9600 baud (default), 8 data bits, 1 stop bit, no parity
Serial control pin configurations	
9-pin female D connector	RS-232: 2 = TX, 3 = RX, 5 = GND RS-422: 2 = TX-, 3 = RX-, 5 = GND, 7 = RX+, 8 = TX+
Mini stereo jack	RS-232: tip = TX, ring = RX, sleeve = GND
Ethernet control port	1 RJ-45 female connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	ARP, DHCP, ICMP (ping), TCP/IP, UDP, Telnet, HTTP, SMTP
Default settings	Link speed and duplex level = autodetected IP address = 192.168.254.254 Subnet mask = 255.255.0.0 Gateway = 0.0.0.0 DHCP = off
Web server	Up to 200 simultaneous sessions 7 MB nonvolatile user memory
Program control	Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™) Microsoft® Internet Explorer ver. 6 or higher, Telnet

General

Power*	2 (positive-negative), 100 VAC to 240 VAC, 50/60 Hz; internal, 400 watts each Enclosure without cards: 100 watts at 115 VAC, 60 Hz Enclosure fully loaded with 9 cards: 235 watts at 115 VAC, 60 Hz Each module card: 15 watts at 115 VAC, 60 Hz *A redundant power supply is standard.
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Fan, right to left (as viewed from front panel)
Mounting	
Rack mount	Yes
Enclosure type	Metal
Enclosure dimensions	14.0" H x 17.0" W x 12.25" D (8U high, full rack wide) (35.6 cm H x 43.1 cm W x 31.1 cm D) (Depth excludes connectors and handles. Width excludes rack ears.)
Product weight (fully loaded)	38.5 lbs (17.5 kg)
Shipping weight	47.5 lbs (21.6 kg)
DIM weight	
USA/Canada	146 lbs (63 kg)
International	171 lbs (78 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, CUL, UL
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE *All nominal levels are at ±10%.*

NOTE *Specifications are subject to change without notice.*

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